

Title (en)  
Switching power source.

Title (de)  
Schaltenergiequelle.

Title (fr)  
Source d'énergie à interrupteur.

Publication  
**EP 0490639 B1 19950628 (EN)**

Application  
**EP 91311476 A 19911210**

Priority  
JP 40997790 A 19901210

Abstract (en)  
[origin: EP0490639A2] A resonant type switching power source implementing zero voltage switching on the basis of the resonance between an inductor and a capacitor. A main switch is connected to the primary side of a main transformer. A pulse width control circuit generates a control signal for varying the turn-on time of the main switch until the output voltage of the secondary side of the tranformer being fed back reaches a predetermined value. A resonance capacitor is connected in parallel with the main witch. When the terminal voltage of the capacitor crosses zero potential toward the negative side, the pulse width control circuit delivers an ON commamd to the main switch. Alternatively, the ON control over the main switch may begin at a time a predetermined period of time later than the time for turning on the resonant circuit. <IMAGE>

IPC 1-7  
**H01H 9/54**; **H02M 3/335**

IPC 8 full level  
**H02M 1/34** (2007.01); **H02M 3/28** (2006.01); **H02M 3/335** (2006.01)

CPC (source: EP US)  
**H02M 1/34** (2013.01 - EP US); **H02M 3/01** (2021.05 - EP US); **H02M 3/33569** (2013.01 - EP US); **H02M 1/342** (2021.05 - EP US); **Y02B 70/10** (2013.01 - EP US)

Cited by  
EP0655828A1; EP1635462A1; US6466460B1; US7516548B2; WO0048300A1; WO9925059A1

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DE FR GB

DOCDB simple family (publication)  
**EP 0490639 A2 19920617**; **EP 0490639 A3 19930324**; **EP 0490639 B1 19950628**; AU 641829 B2 19930930; AU 8896191 A 19920611; CA 2057310 A1 19920611; CA 2057310 C 19971028; DE 69110843 D1 19950803; DE 69110843 T2 19960314; JP 2961897 B2 19991012; JP H04210775 A 19920731; US 5267133 A 19931130

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